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Ben Nun

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(54) **ACCOMMODATING INTRAOCULAR LENS ASSEMBLIES AND ACCOMMODATION MEASUREMENT IMPLANT**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 685 days.

This patent is subject to a terminal disclaimer.

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USPC **623/6.37**

(58) **Field of Classification Search**
USPC 623/6.37–6.41
See application file for complete search history.

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(57) **ABSTRACT**

A haptics system for retaining an accommodating intraocular lens (AIOL) in a human eye has an anterior surface and a posterior surface, and at least one shape memory optical element resiliently elastically deformable between a natural shape with a first Diopter strength and a deformed shape with a second Diopter strength different than the first Diopter strength whereby the AIOL has a continuously variable Diopter strength between a minimum Diopter strength for distance vision purposes and a maximum Diopter strength for near vision purposes. The haptics system includes a main body with a longitudinal axis intended to be co-directional with the human eye's visual axis and at least two haptics tangentially extending from said main body in opposite directions in a plane perpendicular to the haptics system's longitudinal axis, and each with at least one pointed puncturing member for penetrating the tough connective tissue of the human eye's sclera for self-anchoring implantation in the human eye's annular ciliary sulcus at at least two spaced apart stationary anchor points for retaining the AIOL along the human eye's visual axis.

6 Claims, 7 Drawing Sheets